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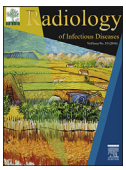
Radiology of Infectious Diseases 3 (2016) 143−144



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Letter

Six cases of imported yellow fever in China: March 12, 2016−March 24, 2016

Keywords: Yellow fever; China; Travelers

Dear editor,

The first case of imported yellow fever was confirmed on March 12, 2016 in China, the patient was a 32-year-old man who became ill with fever (the highest temperature is 39.3°) and chills on March 8, 2016 in Luanda, the capital of Angola, flew to Beijing at 2 o'clock in the morning on March 10, and straighted to the hospital. Up to March 24, 2016, there were a total of 6 cases of imported yellow fever in our country, all patients were from Angola.

Yellow fever, a mosquito-borne flavivirus disease occurs in tropical areas of South America and Africa. The disease is transmitted by blood-feeding Aedes mosquito species. Humans usually acquire the infection accidently when bitten by sylvatic mosquitoes that previously fed on non-human primates (e.g., viremic monkeys), while they are visiting or working in the jungle (so-called jungle yellow fever). On the other hand, in the city, where relatively large population living in close proximity to mosquito species, humans may also serve as the viremic host for inter-human transmission by *Aedes aegypti* (so-called urban yellow fever) [1].

The incubation period is usually 3−6 days, also can be up to 10 days. Most patients infected yellow fever are asymptomatic or mild symptom. Clinical disease varies from a mild, nonspecific febrile illness to a severe acute disease with jaundice, hemorrhage, nausea, vomiting, epigastric pain, renal failure, severe hepatic dysfunction [1], and may lead to death, with a case fatality rate ranging between 20% and 50% [2]. Typical clinical course can be divided into the following four periods. (a) Infection period: this period is the viremia stage, acute onset, lasts for 3−5 days. Patients present nonspecific symptoms, such as chills, fever (up to 39°C−41 °C), headache, dizziness, photophobia, epigastric pain, muscle pain, anorexia, nausea, vomiting, restlessness, irritability. (b) Remission period: 3−5 days later, symptoms relieve. (c) Poisoning period (liver and kidney damage): the illness aggravates, multiple organs damage, often involve the liver, kidney and blood system. (d) Recovery period: the symptoms gradually disappear during the following 2−4 weeks.

Prevention through vaccination is critical to reduce morbidity and mortality from yellow fever virus infection. A single primary dose of yellow fever vaccine is sufficient to confer sustained immunity and lifelong protection against yellow fever disease, and is adequate for most travelers, nevertheless, risk groups, such as persons infected with human immunodeficiency virus (HIV) or infants, who might benefit from a booster dose [3−5]. Because no curative treatment is available, only supportive care can be provided.

Preventive measures include the following three aspects. First, control the source of infection. For suspected and confirmed case, effective anti-mosquito and isolation measures should be taken. Screening of febrile returning travelers from infected area is highly advised. Possible further control measures include Yellow fever infection and the timely notification of public health authorities. The role of clinicians is crucial and includes early diagnosis and timely notification of public health authorities in order to quickly implement adequate control measurements. Second, cut off the route of transmission. Anti-mosquito, killing mosquito (spraying adult mosquitoes and destruction of larval breeding sites) is an important prevention and control measure. Adequate public health preventive measures, such as, public education and mosquito bite prevention, should be implemented quickly after the diagnosis of an imported case. Third, protect vulnerable groups. People should get Yellow fever vaccination at least 10 days before they leave for the endemic area, and take personal anti-mosquito measures.

Peer review under responsibility of Beijing You'an Hospital affiliated to Capital Medical University.

http://dx.doi.org/10.1016/j.jrid.2016.07.007

Financial support

This paper was supported by Beijing Municipal Administration of Hospitals Clinical Medicine Development of Special Funding (No. ZYLX201511), National Nature Science Foundation of China (8157070365) and Beijing Municipal Administration of Hospitals Incubating Program (PX2016036).

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17 November 2015